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INSTALLATION OF TP 93884 FILTER ASSEMBLY FOR SENDING CONTACTS OF NO. 15 OR NO. 20 TELETYPEWRITERS AND No. 15 PERFORATOR-TRANSMITTER

1. GENERAL

1.01 This section furnishes information for the installation of the TP 93884 filter assembly for the sending contacts of the No. 15 or No. 20 teletypewriters and the No. 15 perforator-transmitter. The function of this filter unit is to suppress radio frequency induction from the sending contacts of these teletypewriters.

1.02 This section is reissued to change the wiring at the sending contacts of keyboards not equipped with a line-test key to correspond with that of keyboards having a line-test key. Other minor changes are included.

1.03 If the typing unit of the machine to be equipped is one of the few early models in which the main driving gear is inside instead of outside the frame, it will be necessary to substitute one of the later models for the older style unit to avoid mechanical interference between the right-hand bearing housing and the TP 93883 condenser and bracket of the TP 93884 filter assembly.

1.04 The TP 93884 filter assembly consists of a TP 92222 Filter Unit and a TP 93883 set of parts.

TP 92222 Filter Unit consists of the following:

1 TP 105964 Filter Assembly
2 TP 6746 Screws
5 TP 7002 Washers
2 TP 8539 Screws

TP 93883 Set of Parts consists of the following:

1 TP 105966 Condenser Assembly
1 TP 75400 Screw
1 TP 78103 Screw
1 TP 2191 Lock Washer
1 TP 7002 Washer
1 TP 3598 Nut

2. PROCEDURES

Installation of TP 93884 Filter Assembly on No. 15 or No. 20 Teletypewriters

2.01 To install the TP 92222 filter unit on No. 15 or No. 20 type keyboards proceed as follows:

(1) Remove the two TP 6746 screws which mount the TP 7387 brace to the TP 7382 front bracket of the sending contacts cam assembly. Retain the TP 2191 lock washers and the TP 41663 flat washers.

(2) Mount the TP 105964 filter assembly against the TP 7382 front bracket so that the coil and condensers are to the rear of the filter bracket with the coil to the left using the previously removed TP 2191 lock washers and the TP 41663 flat washers under the heads of the TP 8539 screws furnished with the filter. Use the two TP 7002 flat washers furnished, between the filter bracket and the TP 7382 front bracket to space the filter away from the front bracket. Rotate the filter bracket clockwise until it stops against the TP 7383 oiler and tighten the TP 8539 screws.

(3) Remove the sending contacts mounting screw just to the front of the sending contacts soldering terminals and place the terminal of the shielded filter lead under the head of this screw after placing a TP 7002 washer furnished, between the terminal of the shielded lead and the TP 2191 lock washer to prevent mutilation of the terminal. The filter leads should be located to the left of the guard post on the filter bracket.

(4) Replace the sending contacts mounting screw.

(5) Discard the two TP 6746 screws furnished with the filter unit. (These are required only when a TP 92222 filter is replacing a TP 82019 filter.)

2.02 To install the TP 93883 set of parts on the 15A and 15B bases mount the TP 105966 condenser assembly (.01 mf) as follows:

(1) Remove the two TP 6810 screws and TP 2669 lock washers which secure the terminal block assembly to the base casting, and lift the terminal block assembly away from the base as far as the cable will permit. With either sandpaper or a sharp tool, remove the enamel from the top surfaces of the mounting screw hole areas so that the TP 2669 lock washers will contact the unfinished surfaces. Replace the terminal block assembly and secure it by means of the screws and lock washers furnished.

(2) Replace the rear mounting screw of the 41-46 terminal block with the TP 75400 screw furnished. Discard the screw just removed and the TP 78103 screw furnished with the parts.

(3) Mount the condenser and bracket assembly against the left side of the terminal block bracket so that the new screw passes through the elongated hole in the bracket resting on the base casting. Secure the bracket with the TP 3598 nut, TP 2191 lock washer and TP 7002 washer furnished.

2.03 To install the TP 93883 set of parts on the 15C and 15D bases mount the TP 105966 condenser assembly as follows:

(1) First proceed as specified in (1) of 2.02 above.

(2) Replace the rear mounting screw of the 26-point terminal block with the TP 78103 screw furnished. Discard the screw removed and the TP 75400 screw furnished.

(3) Mount the condenser as specified in 2.02 (3).

Installation of TP 92222 Filter Unit on No. 15 Perforator-Transmitter

2.04 To install the filter on the perforator-transmitter proceed as follows:

(1) Remove the two TP 74986 screws which mount the TP 84911 bracket and the TP 7382 front bracket on the TP 7387 brace. Retain the TP 2191 lock washers and the TP 41663 flat washers. Discard the TP 74986 screws.

(2) Discard the TP 7002 washers furnished. Mount the TP 105964 filter assembly against the TP 84911 bracket so that the coil and condensers are to the rear of the filter bracket with the coil to the left. Using the TP 8539 screw furnished, and the TP 2191 lock washers and TP 41663 flat washers previously removed, secure the TP 84911 bracket and the TP 7382 front bracket to the TP 7387 brace.

(3) Rotate the filter unit clockwise until it stops against the TP 7383 oiler and tighten the TP 8539 screws.

(4) Remove the sending contacts mounting screw just to the front of the sending contacts soldering terminals and place the terminal of the shielded filter lead under the head of this screw, taking care that the filter leads are to the left of the guard post on the filter bracket.

(5) Replace the sending contacts mounting screw.

(6) Discard the two TP 6746 screws furnished with the filter unit.

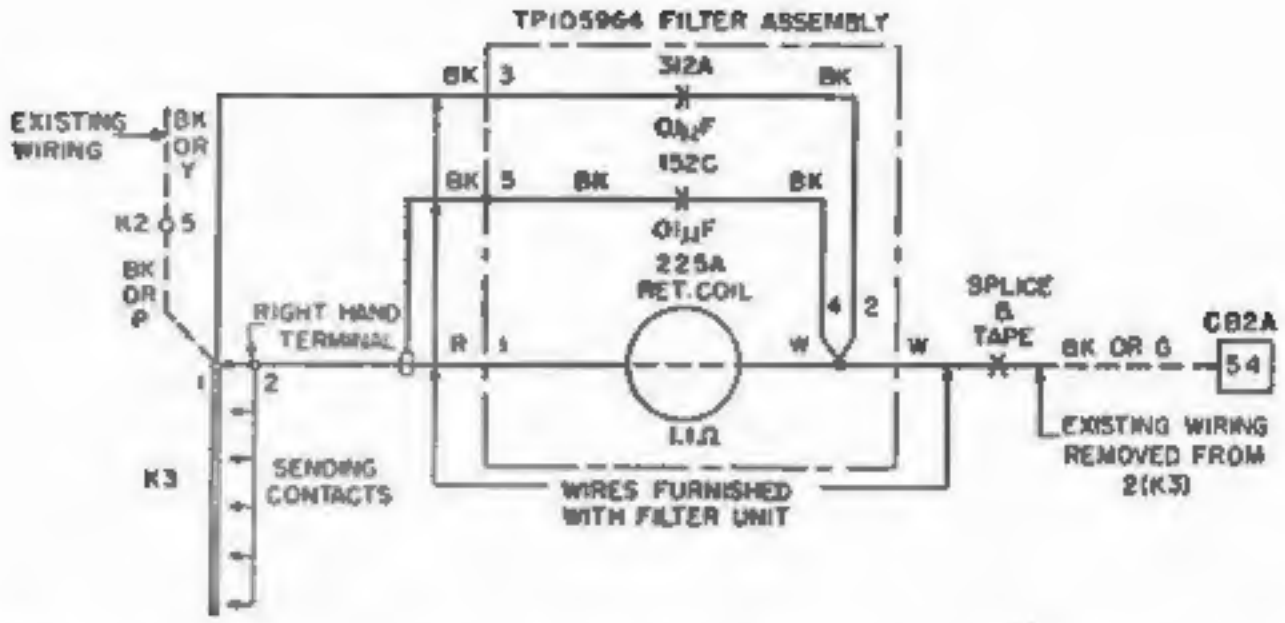

Fig. 1—(With Line-Test Key) 15A, B, and C Keyboards and 15 Type Perforator-Transmitters

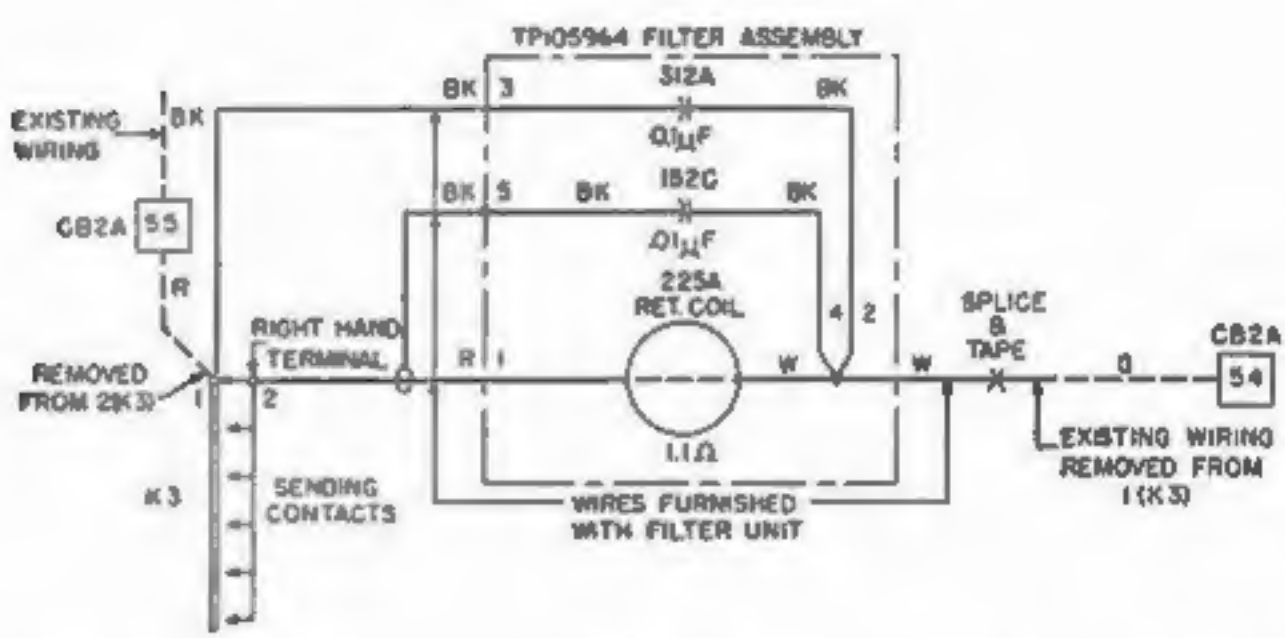

Fig. 2—(Without Line-Test Key) 15D, E, F and G Keyboards

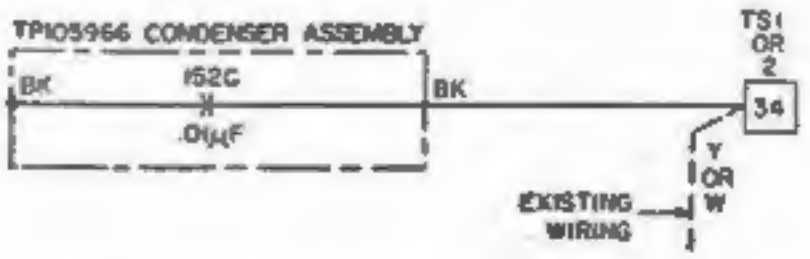

Fig. 3—15A, B and C TTY Bases

Wiring Connections for Keyboards

2.05 For 15A, B and C Keyboards and 15 Type Perforator-Transmitter refer to Fig. 1 and connect the TP 105964 filter assembly as follows:

(1) Disconnect the BK wire from the right-hand terminal of the sending contacts 2(K3) and splice it to the W wire of the filter. Check to make sure that the other end of the BK wire terminates at terminal 54.

(2) Connect the R wire (shielded) of the filter to the right-hand terminal of the sending contacts 2(K3).

(3) Connect the BK wire of the filter to the left-hand terminal of the sending contacts 1(K3). Check to make sure that the other end of the BK wire that is connected to the left-hand terminal of the sending contacts terminates at the line-test key. With the Line-Test key in the LINE position, the circuit should extend to terminal 55.

2.06 For 15D, E, F and G Keyboards refer to Fig. 2 and connect the TP 105964 filter assembly as follows:

(1) Disconnect the G wire from the left-hand terminal of the sending contacts 1(K3) and splice it to the W wire of the filter. Check to make sure that the other end of the G wire terminates at terminal 54.

(2) Move the R wire from the right-hand terminal of the sending contacts 2(K3) to the left-hand terminal 1(K3) and also connect the BK wire of the filter to the terminal. Check to make sure that the other end of the R wire terminates at terminal 55.

(3) Connect the R wire (shielded) of the filter to the right-hand terminal of the sending contacts 2(K3).

Wiring Connections for Bases

2.07 Connect the free lead from the condenser to terminal 34 (see Fig. 3).